linkedin.com/in/changrichmond

SOFTWARE ENGINEER

EXPERIENCE

UCI Office of Information Technology

Programmer Analyst II

Jul 2015 - Present

- Migrated customers to the Ellucian student information system. Used T-SQL/Oracle to filter/cleanse data.
- Designed and developed a C# program to identify potential duplicate accounts within third party customers.
- Added functionality to two web applications (Tomcat Servlet/Jasper Report, Spring/Hibernate) and modified the database to handle variable rate institutional loans. Fixed bugs in Spring/Hibernate app.
- Scripted Bash process to get encrypted reports; decrypted, archived, and sent reports to departments.
 - Coordinated with Bank of America and UCI departments to set up PGP/SFTP.

Student Programmer

Dec 2012 - Jun 2015

- Developed a Java Spring/Hibernate web application within the existing campus-wide student billing system to allow staff to manage lab fees for academic quarters.
- Wrote SQL and Bash scripts to migrate and convert 100+ tables from the old financial system.
- Wrote and unit tested a reusable Java module replacing maintenance downtime logic for 3 web applications.

Web Data Extraction - Freelance

Nov 2012 - Jan 2013, Dec 2014

- Developed C# programs to extract structured property tax data from HTML for clients.
- Optimized C# URL to TLD conversion program from a run time of 5-7 minutes to 6-10 seconds.

PROJECTS

Ludum Dare 29, 30, 33 (48 hour themed competition where games/assets are developed in solo)

- o Boat Simulator (Apr. 2014, Java, LibGDX) Sandbox boat in buoyant water
- o Fairy Catcher (Aug. 2014, Java, LibGDX) Arcade game of switching planes to catch fairies
- o Iron Cog Goblin (Aug. 2015, C#, Unity 2D) Stealth 2D platformer of goblin collecting treasure

Advanced Database System Course

Apr 2015 - Jun 2015

- Implemented major components of a relational database system in C++
- Read/write records to disk, CRUD operations on records, indexing (top-down B+ tree), system catalogs
- Designed internal page layout, handling nulls and variable length strings

Shakedown May 2014 – Feb 2015

- C# ASP.NET MVC web service that runs students' submitted code against instructor's test code
- Distributed service using RabbitMQ to dispatch tests to workers supporting the language being tested
- Developed on a team of 5 members. Unit tested the Test Runner and the website, created views and controllers, worked on communication modules, and configured environments.

BoardGameServer (https://github.com/Inf-122-Team-3/finalprojectteam3)

Feb 2014 - Mar 2014

- Created a modular server-client system in Java to allow any board game to be played
- Designed and documented the architecture and established interfaces between components
- Collaborated and presented in a team of 9 members. Led UI team of 3 members.

EDUCATION

University of California, Irvine (Cum Laude)

June 2015

• B.S., Computer Science; B.S., Software Engineering

GPA: 3.8

SKILLS

- Languages: Java, C#/LINQ, C++, TSQL/Oracle, Bash, HTML/CSS/JS, Functional paradigm, Python
- Tools: Visual Studio, Eclipse, SQL Server; Git, SVN; UNIX; Spring/Hibernate; Selenium; JSON, XML; XPath